

## SECTION 746 POLE BASES

**746.01 Description.** This work consists of furnishing pole bases Types 1, 2, 2A, 2B, 3, 3A, 3B, 4, 5, and 6 for poles at locations as directed by the Engineer.

**746.02 Materials.** The concrete for pole bases shall conform to Section 812, Class B. Bar reinforcement shall meet the requirements of [Section 603](#) Grade 60 (Grade 420). Ground rods shall be copper covered, approved by the Underwriters' Laboratory and be supplied with approved clamps for connecting the grounding conductor to the rod. Conduit for sweeps shall meet the requirements for galvanized rigid steel conduit in Section 745. Anchor bolts will be supplied by the Department for Types 1, 2, 2A, 2B, 3A and 3B bases and will be supplied by the District Engineer in charge of the project. For Types 4, 5, and 6, the Contractor shall supply the anchor system as indicated on the Standard Construction Details and as directed by the Engineer. The anchor bolts and nuts for Types 5 and 6 shall be hot-dipped galvanized and meet the requirements of AASHTO M 314. Anchor bolts shall have a minimum yield strength of 55,000 psi (379 MPa).

**746.03 Construction Methods.** The bases shall conform to the dimensions as indicated on the Standard Construction Details. A ground rod shall be installed as shown. A minimum of 6N (1.8 m) of the ground rod must be driven into undisturbed soil.

If a utility or a right-of-way conflict is found when a Type 2 or Type 3 base is specified in the Plans, an alternate base of equivalent strength may be used as directed by the Engineer. A Type 2 base has two equivalents, namely Types 2A and 2B. A Type 3 base has two equivalents, namely Types 3A and 3B.

Though the Contract calls for the use of a round pole base, the Contractor may use a square base at its discretion.

Excavation for the pole bases may not exceed the dimension of the foundation by more than 12O (300 mm) in any one direction. If a form is used in the excavation more than 18O (450 mm) below the ground surface, it is necessary that the area between the form and the excavation be filled and tamped on all sides in layers not to exceed 6O (150 mm).

Where a pole base is to be placed in existing concrete pavement such as a sidewalk, the concrete shall be saw cut in a square pattern or removed to the nearest joint. In other pavement material, a round hole may be cut using an appropriate tool. Any damage to existing pavement shall be repaired. The repair will be approved by the Engineer.

The bases shall be edged and have a broom finish.

**746.04 Method of Measurement.** The quantity of pole bases will be measured as the actual number of bases constructed.

**746.05 Basis of Payment.** The quantity of pole bases will be paid for at the Contract unit price for each pole base type. If an alternate base type is selected by the Engineer, payment will be the Contract unit price for the alternate selected. Price and payment will constitute full compensation for furnishing and placing all materials; for a minimum of two conduit sweeps extending into the base; for excavating, backfilling, and compacting around the base; for repairs to damaged existing pavement; for removal or replacement of pavement; and for all labor, equipment, tools, and incidentals required to complete the work.

Payment for any additional sweeps will be paid for under [Section 745](#).

The Contractor's use of square base rather than a specified round base shall not result in any additional cost to the Department.

